

# OUTPUT CIRCUIT AND RELATED APPARATUS AND METHOD FOR ELECTRICALLY DETECTING WHETHER CABLE IS CONNECTED TO OUTPUT PORT OF OUTPUT CIRCUIT

## Abstract

An output circuit of a player can detect whether a cable is electrically connected to an output port of the output circuit. The output circuit includes a signal circuit and a decision module for detecting whether a cable is connected by detecting voltage change at the output port. If the decision module determines that a cable is connected, the signal circuit will provide video or audio signals of the player to the output port. If the decision module determines that no cable connected, the signal circuit will provide a predetermined detecting signal with nonzero average power to the output port, such that the decision module can detect whether the output end is connected to a cable again by detecting voltage change of the detecting signal.